

LIST OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A multi-element field emission cathode, comprising:  
a common carrier assembly; and  
a plurality of sub-assemblies on the common carrier assembly, each sub-assembly having a field emission array, the array having a selected area, wherein each array is associated with corresponding first and second electrical bond pads for independently controlling emission current from each the array.
2. (original) The field emission cathode of claim 1 wherein the field emission array is comprised of carbon-based emitters.
3. (original) The field emission cathode of claim 1 wherein the selected area of the array is circular, the area having a diameter in the range from about 10 micrometers to about 100 micrometers.
4. (original) The field emission cathode of claim 1 wherein the width of a sub-assembly is approximately 70 micrometers.
5. (original) The field emission cathode of claim 1 wherein the number of sub-assemblies mounted on the common carrier assembly is in the range from four to ten.

6. (original) The field emission cathode of claim 1 wherein the number of sub-assemblies mounted on the common carrier assembly is six.
7. (new) The field emission cathode of claim 1, wherein the first electrical bond pad is a field emitting material pad and the second electrical bond pad is a gate electrode pad.
8. (new) The field emission cathode of claim 1, wherein the field emission cathode is incorporated into a cathode ray tube.
9. (new) The field emission cathode of claim 8, wherein the cathode ray tube includes a phosphor screen, the phosphor screen having red, blue, and green phosphor stripes, each of the stripes separated by a mask stripe.
10. (new) The field emission cathode of claim 9, wherein the mask stripe is composed of metal.
11. (new) The field emission cathode of claim 9, wherein the mask stripe has a width that is equal to one half the distance required to turn off an electron beam emitted from the field emission cathode at sweep velocity.